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(54) Title: PROCESS FOR REALISING A BIOMORPHIC, STEREOLITHOGRAPHED PHANTOM, WHICH IS MULTICOM-PARTMENTAL AND SUITABLE FOR MULTIANALYTICAL EXAMINATIONS, AND RELEVANT DEVICE



(57) Abstract: The present invention concerns a process for preparing digital images for realising a multicompartmental biomorphic phantom, comprising a phase A.1 of acquisition of images of the organ belonging to the analysed living being, forming a volumetric image defined by voxels, and a phase A.2 of identification of tissues and/or tissue liquids and a phase B of selection of at least three of said tissues and/or tissue liquids, the process being characterised in that it comprises a phase C.1 for verifying the adjacency of the voxels belonging to each single tissue or tissue liquid, so that each tissue or tissue liquid defines a connected volume; a phase C.3 for preparing an image presenting the surfaces of the volumes defined in phase C.1 according to the sub-phase C.3.2 wherein it is determined a

number of surfaces equal to the number of tissues, such that they result internal to one another, even if partially tangent, said surfaces being the convolution of the surfaces of one or more volumes defined in phase C.1, said surfaces giving, by addition or subtraction, all the surfaces corresponding to the tissues or tissue liquids selected in phase B, and a phase C.3.3 wherein a thickness is assigned to said surfaces, so that in the portions wherein two or more surfaces are tangent to one another the thickness is assigned to only one surface, the set of said thickness forming a connected volume. The invention further concerns a phantom produced by using the method according to the invention.